

## CLAIMS

What is claimed is:

1. A hard surface floor cleaning device comprising:

5 a) a head including a housing;

b) a manually operated handle, said handle flexibly coupled to said head and adapted to oscillate with respect thereto;

10 c) at least one powered vibratory unit mounted in or on said housing;

d) said unit adapted to impart a substantially vertically oriented vibration to said head to enhance efficacy of cleaning of a floor surface.

15 2. The device of claim 1, wherein said vibratory unit is powered by an electric motor.

3. The device of claim 2, wherein said motor comprises a drive shaft, and said vibratory unit  
20 comprises a driven shaft coupled to said drive shaft; said driven shaft comprising an eccentric weight affixed thereto, said shafts mounted horizontally so as to be substantially parallel to an upper laterally extending portion of said housing so as to produce said vibration  
25 having a substantially vertical component.

4. The device of claim 1, further including a rechargeable battery disposed within the housing for powering the motor.

30 5. The device of claim 4, further including a power switch electrically coupled between the battery and the motor.

35 6. The device of claim 5, further including two separate motors, one on each lateral side of said head,

